

CLAIMS

Claim 1. (Currently Amended) A strain of a micro-organism ~~characterized in that one or more of its comprising~~ NADPH-oxidizing ~~activities have been~~ activity that is limited by a deletion of at least one gene coding for a quinone oxidoreductase and/or a soluble transhydrogenase, and wherein [[it]] said strain has also undergone a modification[[s]] that favours at least one ~~one or more of its~~ NADP⁺-reducing enzyme activities of said strain by a deletion of at least one gene coding for a phosphoglucose isomerase and/or a phosphofructokinase.

Claim 2-4. (Cancelled)

Claim 5. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it has also undergone the a modification[[s]] of ~~one or more genes~~ at least one gene coding for at least one of a dihydrolipoamide dehydrogenase and a glyceraldehyde 3-phosphate dehydrogenase so as to cause it to utilize NADP preferentially.

Claim 6. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it also overexpresses ~~one or more genes~~ at least one gene coding for a glucose 6-phosphate dehydrogenase, [[or]] a 6-phosphogluconolactonase, [[or]] a 6-phosphogluconate dehydrogenase, [[or]] an isocitrate dehydrogenase, or a membrane-bound transhydrogenase.

Claim 7. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it has also undergone the a modification[[s]] of ~~one or more genes~~ at least one gene coding for a 6-phosphogluconate dehydratase, [[or]] a malate synthase, [[or]] an isocitrate lyase, or an isocitrate dehydrogenase kinase/phosphatase.

Claim 8. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it comprises ~~one or more~~ at least one endogenous or exogenous genes gene coding for an enzyme[[s]] involved in the biotransformation of a substance of interest.

Claim 9. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it comprises ~~one or more~~ at least one selection marker ~~genes~~ gene.

Claim 10. (Withdrawn – Currently Amended) A strain according to Claim 1, wherein said strain characterized in that it is selected from the group consisting of *Aspergillus sp.*, *Bacillus sp.*, *Brevibacterium sp.*, *Clostridium sp.*, *Corynebacterium sp.*, *Escherichia sp.*, *Gluconobacter sp.*, *Penicillium sp.*, *Pichia sp.*, *Pseudomonas sp.*, *Rhodococcus sp.*, *Saccharomyces sp.*, *Streptomyces sp.*, *Xanthomonas sp.* and *Candida sp.*

Claim 11. (Currently Amended) A method for the preparation of the strain of Claim 1 comprising:

(a) deleting ~~one or more genes~~ at least one gene coding for a quinone oxidoreductase and/or a soluble transhydrogenase, and optionally

(b) deleting ~~one or more genes~~ at least one gene coding for a phosphoglucose isomerase, [[or]] a phosphofructokinase, [[or]] a 6-phosphogluconate dehydratase, [[or]] a malate synthase, [[or]] an isocitrate lyase or an isocitrate dehydrogenase kinase/phosphatase, and

(c) optionally modifying ~~one or more genes~~ at least one gene coding for at least one of a dihydrolipoamide dehydrogenase and a glyceraldehyde 3-phosphate dehydrogenase, so as to cause it to utilize NADP preferentially, which deletion[[s]] and modification[[s]] are carried out by appropriate means, and optionally overexpressing ~~one or more genes~~ at least one gene coding for a glucose 6-phosphate dehydrogenase, [[or]] a 6-phosphogluconolactonase, [[or]] a 6-phosphogluconate dehydrogenase, [[or]] an isocitrate dehydrogenase, or a membrane transhydrogenase, either by converting the strain by means of an appropriate vector containing ~~one or more genes~~ at least one gene coding for one or more enzymes involved in the biotransformation of at least one of a substance of interest and ~~one or more~~ at least one selection marker genes, or by modifying the strength of the endogenous promoter or promoters controlling the gene or genes to be overexpressed.

12. (Currently Amended) A method for the production of a substance of interest formed by a biosynthesis route of which at least one step is NADPH-dependent ~~characterized in that it comprises the following steps~~ comprising:

- a) growing micro-organisms of the strain of Claim 1 in an appropriate culture medium that favours their growth and contains substances necessary for carrying out biotransformations by fermentation or bioconversion, except NADPH; and
- b) extracting a substance of interest from the medium and optionally purifying said substance.

13. (Withdrawn) The method according to Claim 12 characterized in that the substance of interest is an amino acid, or a vitamin, or a sterol, or a flavonoid, or a fatty acid, or an organic acid, or a polyol or a hydroxyester.